

OUTBREAK OF A TWIG BEETLE, *PITYOPHTHORUS OPACULUS*
LECONTE, IN COLORADO

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ABSTRACT

This widely-distributed but little-known species of bark beetle caused death and discoloration of affected new growth on host trees in 1978.

Our attention was recently drawn to severely discolored subalpine firs, *Abies lasiocarpa* (Hook.) Nutt., in the vicinity of Rifle, Garfield County, Colorado. Similar tree damage was also reported from the vicinity of Yampa, Routt County, and Colbran, Mesa County. A visit to the Rifle site disclosed an extensive infestation of *Pityophthorus opaculus* LeConte, a small (ca. 1.5 mm long) twig-mining scolytid.

Bright (1977) indicated that *P. abietis* Blackman, *P. albertensis* Blackman, and *P. exiguus* Blackman are synonymous with *P. opaculus*. The species is distributed from the Chiricahuas and Sacramento Mountains in Arizona and New Mexico northward through the Great Basin and Rocky Mountains to Alberta, and east to West Virginia, New York, and Maine. Under one or another of its synonyms, it is recorded from a variety of conifers, including *Abies*, *Larix*, *Picea*, *Pinus*, and *Pseudotsuga* (Blackman 1928). It is rare enough not to be well known to forest entomologists in the western United States. Little has been known of its habits; Craighead (1950) indicates it breeds in twigs of spruce, white pine, larch, and balsam fir.

We collected specimens on 26 VII 1978. Most were mature adults evidently about ready to emerge. There were a few large larvae. All were in mined out shoots of fully developed 1977 growth, the needles of which had faded but not fallen. The intensity of the infestation was such that in some areas much of the 1977 foliage on most trees—from sapling to large mature size—had been killed. In other areas the damage was less severe. The length of mined shoots and associated faded foliage was variable, but generally amounted to about 5 cm.

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